

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Markus Graf v. MATUSCHKA-  
GREIFFENCLAU and  
Hans Peter JANDER

Serial No.: 10/589,674

Filed: August 16, 2006


For: ALCOHOL METABOLISM  
MODERATING COMPOSITION

Group Art Unit: 1651

Examiner: Sheridan R. Macauley

Atty. Dkt. No.: DEBE:068US/SLH

Confirmation No. 9938

CERTIFICATE OF ELECTRONIC TRANSMISSION 37 C.F.R. § 1.8	
I hereby certify that this amendment is being electronically filed with the United States Patent and Trademark Office via EFS-Web on the date below:	
<u>August 2, 2010</u> Date	 Steven L. Highlander

DECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

I, the undersigned, do declare that:

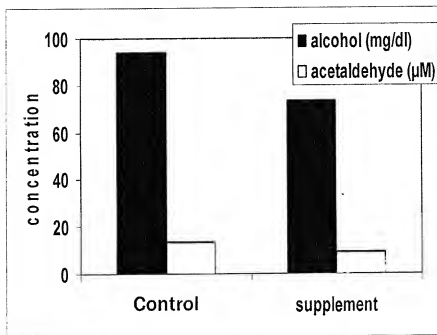
1. I am a citizen of Japan residing at 1-10-8-1003 Minamisenba, Chuo-ku, Osaka-city 542-0081 Japan. I currently hold the position of Chief Executive Scientist of TIMA Foundation and Executive Officer at Brookfield Medical Inc. in Japan. My research experience includes cancer metastasis, blood coagulation of cancer, alcohol metabolism and glucose metabolism. A copy of my *curriculum vitae* is attached.

2. I performed the following experiment. One hundred ml of the solution of the following composition was administered orally to test subjects (n = 5) 20 min prior to alcohol ingestion:

Coenzyme Q10	100 mg
Riboflavin	40 mg
L-Cysteine	500 mg
Ascorbic acid	1,000 mg
Succinic acid	100 mg
Fumaric acid	100 mg
L-Glutamine	<u>1,000 mg</u>
	2,840 mg dissolved in 100 ml H <sub>2</sub> O

Ingredients of the supplement were purchased from Sigma Aldrich Japan (Tokyo, Japan). Subjects ingested 400 ml of red wine (containing 12.5 percent by volume of ethanol which corresponds to 50 gram of ethanol) in the course of 30 min. Seven ml of blood was obtained from the cubitus vein 30 min after finishing ingestion of alcohol. Two ml of blood was used for the determination of the ethanol concentration, and 5 ml for the determination of the acetaldehyde concentration. Control subjects ingested the same kind and amount of wine, but received no composition prior to the alcohol ingestion.

3. For the ethanol measurement, whole blood was stored at 4 °C in a heparin coated tube. For the acetaldehyde measurement, blood samples were immediately centrifuged by heparin coated tube at 1500 rpm for 10 minutes, and serum samples were frozen at -80°C. Ethanol and acetaldehyde were measured by BML, INC. (Shibuya-ku, Tokyo, Japan). The results are shown in figure below:



As can be seen above, the subjects who were treated with the composition prior to ingestion of wine had lower alcohol and acetylaldehyde blood concentrations.

4. I declare that all statements made herein of my own knowledge are true, and that all statements of my own belief are believed to be true, and further that these statements were made with the knowledge that willful false statements are punishable by fine or imprisonment, or both, under § 1001 of title 18 of the United States Code.

29/July/2010  
Date

H. Inufusa  
Prof. Dr. Haruhiko Inufusa